

SEQUENCE LISTING

(1) GENERAL INFORMATION:

- (i) APPLICANT: Little II, Roger G.
Lim, Edward
Fadem, Mitchell B.
- (ii) TITLE OF INVENTION: Anti-Fungal Peptides
- (iii) NUMBER OF SEQUENCES: 211
- (iv) CORRESPONDENCE ADDRESS:
 - (A) ADDRESSEE: McAndrews, Held & Malloy, Ltd.
 - (B) STREET: 500 West Madison Street, 34th Floor Drive
 - (C) CITY: Chicago
 - (D) STATE: Illinois
 - (E) COUNTRY: United States of America
 - (F) ZIP: 60661
- (v) COMPUTER READABLE FORM:
 - (A) MEDIUM TYPE: Floppy disk
 - (B) COMPUTER: IBM PC compatible
 - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
 - (D) SOFTWARE: Patent In Release #1.0, Version #1.25
- (vi) CURRENT APPLICATION DATA:
 - (A) APPLICATION NUMBER:
 - (B) FILING DATE:
- (vii) PRIOR APPLICATION DATA:
 - (A) APPLICATION NUMBER: 08/372,105
 - (B) FILING DATE: 13-JAN-95
- (vii) PRIOR APPLICATION DATA:
 - (A) APPLICATION NUMBER: 08/306,473
 - (B) FILING DATE: 15-SEP-94
- (vii) PRIOR APPLICATION DATA:
 - (A) APPLICATION NUMBER: 08/273,540
 - (B) FILING DATE: 11-JUL-94
- (vii) PRIOR APPLICATION DATA:
 - (A) APPLICATION NUMBER: 08/209,762
 - (B) FILING DATE: 11-MAR-94
- (vii) PRIOR APPLICATION DATA:
 - (A) APPLICATION NUMBER: 08/183,222
 - (B) FILING DATE: 14-JAN-94
- (vii) PRIOR APPLICATION DATA:
 - (A) APPLICATION NUMBER: 08/093,202
 - (B) FILING DATE: 15-JUL-93
- (vii) PRIOR APPLICATION DATA:
 - (A) APPLICATION NUMBER: 08/030,644
 - (B) FILING DATE: 12-MAR-93
- (viii) ATTORNEY/AGENT INFORMATION:
 - (A) NAME: McNicholas, Janet M.
 - (B) REGISTRATION NUMBER: 32,918
 - (C) REFERENCE/DOCKET NUMBER: 100-238/11021US01

(ix) TELECOMMUNICATION INFORMATION:

- (A) TELEPHONE: 312/707-3839
- (B) TELEFAX: 312/707-9155
- (C) TELEX: 650 388-1248

(2) INFORMATION FOR SEQ ID NO:1:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 22 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc feature
- (D) OTHER INFORMATION: "XMP.5"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

Val His Val His Ile Ser Lys Ser Lys Val Gly Trp Leu Ile Gln Leu
1 5 10 15

Phe His Lys Lys Ile Glu
20

(2) INFORMATION FOR SEQ ID NO:2:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 13 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc feature
- (D) OTHER INFORMATION: "XMP.11"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

Lys Ser Lys Val Trp Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:3:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 29 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.12"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

Ser	Val	His	Val	His	Ile	Ser	Lys	Ser	Lys	Val	Gly	Trp	Leu	Ile	Gln
1				5					10					15	
Leu	Phe	His	Lys	Lys	Ile	Glu	Ser	Ala	Leu	Arg	Asn	Lys			
			20					25							

(2) INFORMATION FOR SEQ ID NO:4:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.13"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

Lys	Ser	Lys	Val	Gly	Trp	Leu	Ile	Gln	Leu	Phe	His	Lys	Lys
1				5				10					

(2) INFORMATION FOR SEQ ID NO:5:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 28 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.29"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Phe His Lys Lys Lys Ser
 1 5 10 15
 Lys Val Gly Trp Leu Ile Gln Leu Phe His Lys Lys
 20 25

(2) INFORMATION FOR SEQ ID NO:6:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.31"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

Ala Ser Lys Val Gly Trp Leu Ile Gln Leu Phe His Lys Lys
 1 5 10

(2) INFORMATION FOR SEQ ID NO:7:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.32"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

Lys Ala Lys Val Gly Trp Leu Ile Gln Leu Phe His Lys Lys
 1 5 10

(2) INFORMATION FOR SEQ ID NO:8:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

```
(ix) FEATURE:
      (A) NAME/KEY: misc_feature
      (D) OTHER INFORMATION: "YMP.33"
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

(2) INFORMATION FOR SEQ ID NO:9:

(ii) MOLECULE TYPE: peptide

[illegible]

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

(2) INFORMATION FOR SEQ ID NO:10:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 14 amino acids
 (B) TYPE: amino acid
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

```
(ix) FEATURE:
      (A) NAME/KEY: misc_feature
      (D) OTHER INFORMATION: "YMP.35"
```

[illegible]

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

Lys Ser Lys Val Ala Trp Leu Ile Gln Leu Phe His Lys Lys

1 5 10

(2) INFORMATION FOR SEQ ID NO:11:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.36"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

Lys Ser Lys Val Gly Ala Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:12:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.37"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

Lys Ser Lys Val Gly Trp Ala Ile Gln Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:13:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.38"

(A) NAME/KEY: Modified-site
(B) LOCATION: C-Terminus
(D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated."

Lys Ser Lys Val Gly Trp Leu Ala Gln Leu Phe His Lys Lys
1 5 10

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 14 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(A) NAME/KEY: misc_feature
(D) OTHER INFORMATION: "XMP.39"

```
(A) NAME/KEY: Modified-site
(B) LOCATION: C-Terminus
(D) OTHER INFORMATION: /label= Amidation
                      /note= "The C-Terminus is Amidated"
```

Lys Ser Lys Val Gly Trp Leu Ile Ala Leu Phe His Lys Lys
1 5 10

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 14 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(A) NAME/KEY: misc_feature
(D) OTHER INFORMATION: "XMP.40"

```
(A) NAME/KEY: Modified-site
(B) LOCATION: C-Terminus
(D) OTHER INFORMATION: /label= Amidation
                      /note= "The C-Terminus is Amidated"
```

Lys Ser Lys Val Gly Trp Leu Ile Gln Ala Phe His Lys Lys
1 5 10

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 14 amino acids

- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.41"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:

Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Ala His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:17:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.42"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:

Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Phe Ala Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:18:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.43"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Phe His Ala Lys
 1 5 10

(2) INFORMATION FOR SEQ ID NO:19:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.44"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Phe His Lys Ala
 1 5 10

(2) INFORMATION FOR SEQ ID NO:20:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.55"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:

Gly Trp Leu Ile Gln Leu Phe His Lys Lys Ile Glu Ser Ala Leu Arg
 1 5 10 15

Asn Lys Met Asn Ser
 20

(2) INFORMATION FOR SEQ ID NO:21:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(A) NAME/KEY: misc_feature
(D) OTHER INFORMATION: "CMP.32"

(A) NAME/KEY: Modified-site
(B) LOCATION: C-Terminus
(D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Trp His Lys Lys
1 5 10

(i) SEQUENCE CHARACTERISTICS:

(ix) FEATURE:

(A) NAME/KEY: misc_feature
(D) OTHER INFORMATION: "XMP.83"

```
(A) NAME/KEY: Modified-site
(B) LOCATION: 10..12
(D) OTHER INFORMATION: /label= Substituted-Ala
                      /note= "Position 6 is beta-1-naphthyl-substituted"
```

(A) NAME/KEY: Modified-site
(B) LOCATION: C-Terminus
(D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

Lys Ser Lys Val Gly Ala Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(i) SEQUENCE CHARACTERISTICS:

(ix) FEATURE:

(A) NAME/KEY: misc feature
(D) OTHER INFORMATION: "XMP.85"

(A) NAME/KEY: Modified-site
(B) LOCATION: C-Terminus

(D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:23:

Lys Ser Lys Val Leu Trp Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:24:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.85"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:24:

Lys Ser Lys Val Gly Trp Leu Ile Leu Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:25:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.87"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:25:

Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Phe Leu Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:26:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

"XMP.85" "XMP.86" "XMP.87"

(ii) MOLECULE TYPE: peptide

(A) NAME/KEY: misc_feature
(D) OTHER INFORMATION: "XMP.91"

```
(A) NAME/KEY: Modified-site
(B) LOCATION: C-Terminus
(D) OTHER INFORMATION: /label= Amidation
                        /note= "The C-Terminus is Amidated"
```

Lys Ser Lys Val Gly Trp Leu Ile Phe Leu Phe His Lys Lys
1 5 10

(i) SEQUENCE CHARACTERISTICS:

(ii) MOLECULE TYPE: peptide

(A) NAME/KEY: misc_feature
(D) OTHER INFORMATION: "XMP.92"

```
(A) NAME/KEY: Modified-site
(B) LOCATION: C-Terminus
(D) OTHER INFORMATION: /label= Amidation
                        /note= "The C-Terminus is Amidated"
```

Lys Ser Lys Val Gly Trp Leu Ile Lys Leu Phe His Lys Lys
1 5 10

(i) SEQUENCE CHARACTERISTICS:

(ii) MOLECULE TYPE: peptide

(A) NAME/KEY: misc_feature
(D) OTHER INFORMATION: "KMP.94"

(A) NAME/KEY: Modified-site
(B) LOCATION: C-Terminus
(D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Phe Phe Lys Lys

1

5

10

(2) INFORMATION FOR SEQ ID NO:29:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc feature
- (D) OTHER INFORMATION: "XMP.95"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:29:

Lys Ser Lys Val Phe Trp Leu Ile Gln Leu Phe His Lys Lys
 1 5 10

(2) INFORMATION FOR SEQ ID NO:30:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc feature
- (D) OTHER INFORMATION: "XMP.96"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:30:

Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Phe His Lys Phe
 1 5 10

(2) INFORMATION FOR SEQ ID NO:31:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc feature
- (D) OTHER INFORMATION: "XMP.97"

(ix) FEATURE:
 (A) NAME/KEY: Modified-site
 (B) LOCATION: C-Terminus
 (D) OTHER INFORMATION: /label= Amidation
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:31:

Lys Ser Lys Val Lys Trp Leu Ile Gln Leu Phe His Lys Lys
 1 5 10

(2) INFORMATION FOR SEQ ID NO:32:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 14 amino acids
 (B) TYPE: amino acid
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:
 (A) NAME/KEY: misc_feature
 (D) OTHER INFORMATION: "XMP.100"

(ix) FEATURE:
 (A) NAME/KEY: Modified-site
 (B) LOCATION: C-Terminus
 (D) OTHER INFORMATION: /label= Amidation
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:32:

Lys Ser Lys Val Lys Trp Leu Ile Lys Leu Phe His Lys Lys
 1 5 10

(2) INFORMATION FOR SEQ ID NO:33:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 23 amino acids
 (B) TYPE: amino acid
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:
 (A) NAME/KEY: misc_feature
 (D) OTHER INFORMATION: "XMP.101"

(ix) FEATURE:
 (A) NAME/KEY: Modified-site
 (B) LOCATION: C-Terminus
 (D) OTHER INFORMATION: /label= Amidation
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:33:

Lys Ser Lys Val Lys Trp Leu Ile Lys Leu Phe Phe Lys Phe Lys Ser
 1 5 10 15

Lys Val Lys Trp Leu Ile Lys Leu Phe Phe Lys Phe
 20 25

(2) INFORMATION FOR SEQ ID NO:34:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 14 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.104"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:34:

Lys Ser Lys Val Gly Trp Leu Ile Ser Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:35:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 14 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.106"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:35:

Lys Ser Lys Val Gly Trp Leu Ile Thr Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:36:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 14 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.107"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation

/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:36:

Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Phe Trp Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:37:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.108"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:37:

Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Phe His Lys Trp
1 5 10

(2) INFORMATION FOR SEQ ID NO:38:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.109"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 11
- (C) OTHER INFORMATION: /label= Substituted-Ala
/note= "Position 11 is beta-1-naphthyl-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:38:

Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Ala His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:39:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 14 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.110"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 12
 - (C) OTHER INFORMATION: /label= Substituted-Ala
/note= "Position 12 is beta-1-naphthyl-substituted."

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:39:

Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Phe Ala Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:40:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 14 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.111"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 14
 - (C) OTHER INFORMATION: /label= Substituted-Ala
/note= "Position 14 is beta-1-naphthyl-substituted."

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:40:

Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Phe His Lys Ala
1 5 10

(2) INFORMATION FOR SEQ ID NO:41:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 14 amino acids
 - (B) TYPE: amino acid

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.113"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:41:

Lys Ser Lys Val Gly Trp Leu Ile Gln Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:42:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.116"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 6
- (C) OTHER INFORMATION: /label= Substituted-Ala
/note= "Position 6 is beta-1-naphthyl-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:42:

Lys Ser Lys Val Lys Ala Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:43:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.123"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 9
- (C) OTHER INFORMATION: /label= Substituted-Phe
/note= "The phenylalanine at position 9 is
p-amino-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:43:

Lys Ser Lys Val Gly Trp Leu Ile Phe Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:44:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.124"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:44:

Lys Ser Lys Val Lys Trp Leu Ile Gln Leu Trp His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:45:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.125"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:45:

Lys Ser Lys Val Gly Trp Leu Ile Tyr Leu Phe His Lys Lys

1

5

10

(2) INFORMATION FOR SEQ ID NO:46:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.126"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 6
- (C) OTHER INFORMATION: /label= D-Trp
/note= "Position 6 is D-tryptophan."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:46:

Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:47:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.127"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:47:

Lys Ser Lys Val Gly Phe Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:48:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

"XMP.126"

```
(ix) FEATURE:
      (A) NAME/KEY: misc_feature
      (D) OTHER INFORMATION: "YMP.128"
```

[illegible]

Lys Ser Lys Val Gly Phe Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 14 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

```
(ix) FEATURE:
      (A) NAME/KEY: misc_feature
      (D) OTHER INFORMATION: "KMP.129"
```

[illegible]

Lys Ser Lys Val Gly Ala Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 14 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ix) FEATURE:

(A) NAME/KEY: misc_feature
(D) OTHER INFORMATION: "XMP.130"

```
(ix) FEATURE:
      (A) NAME/KEY: Modified-site
      (B) LOCATION: 5
      (C) OTHER INFORMATION: /label= Substituted-Ala
                             /note= "Position 5 is beta-2-nabnthvl-substituted."
```

[illegible]

(xi) SEQUENCE DESCRIPTION: SEO ID NO:50:

Lys Ser Lys Val Gly Ala Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:51:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 14 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

```
(ix) FEATURE:
      (A) NAME/KEY: misc_feature
      (D) OTHER INFORMATION: "XMP.131"
```

```
(ix) FEATURE:
      (A) NAME/KEY: Modified-site
      (B) LOCATION: 6
      (C) OTHER INFORMATION: /label= Substituted-Ala
                             /note= "Position 6 is D-beta-2-naphtyl-substituted."
```

[illegible]

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:51:

Lys Ser Lys Val Gly Ala Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:52:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 14 amino acids
 (B) TYPE: amino acid
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

```
(ix) FEATURE:
      (A) NAME/KEY: misc_feature
      (D) OTHER INFORMATION: "XMP.132"
```


- (B) LOCATION: 5
- (C) OTHER INFORMATION: /label= Substituted-Phe
/note= "Position 5 is para-amino-substituted."

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:54:

Lys Ser Lys Val Phe Trp Leu Ile Gln Leu Phe His Lys Lys
1 5 10

- (2) INFORMATION FOR SEQ ID NO:55:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 14 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.135"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:55:

Lys Ser Lys Val Gly Lys Leu Ile Gln Leu Phe His Lys Lys
1 5 10

- (2) INFORMATION FOR SEQ ID NO:56:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 16 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: circular

- (ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.137"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:56:

Cys Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Phe His Lys Lys Cys
1 5 10 15

(2) INFORMATION FOR SEQ ID NO:57:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.138"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:57:

Lys Ser Lys Val Lys Phe Leu Ile Gln Leu Phe His Lys Lys
 1 5 10

(2) INFORMATION FOR SEQ ID NO:58:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.139"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:58:

Lys Ser Lys Val Gly Tyr Leu Ile Gln Leu Phe His Lys Lys
 1 5 10

(2) INFORMATION FOR SEQ ID NO:59:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.142"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:59:

INFORMATION FOR SEQ ID NO:60:

(ii) MOLECULE TYPE: peptide

```
(ix) FEATURE:
      (A) NAME/KEY: Modified-site
      (B) LOCATION: 10
      (C) OTHER INFORMATION: /label= Substituted-Ala
                             /note= "Position 10 is beta-1-naphthyl-substituted."
```

[illegible]

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:60:

(2) INFORMATION FOR SEQ ID NO:61:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

```
(ix) FEATURE:
      (A) NAME/KEY: misc_feature
      (D) OTHER_INFORMATION: "XMP.144"
```

```
(ix) FEATURE:
      (A) NAME/KEY: Modified-site
      (B) LOCATION: 5
      (C) OTHER INFORMATION: /label= Substituted-Ala
                             /note= "The alanine at position 5 is
                             cyclohexyl-substituted."
```

```
(ix) FEATURE:
      (A) NAME/KEY: Modified-site
      (B) LOCATION: C-Terminus
      (D) OTHER INFORMATION: /label= Amidation
```

/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:61:

Lys Ser Lys Val Gly Ala Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:62:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "KMP.146"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 12
- (C) OTHER INFORMATION: /label= Substituted-Ala
/note= "Position 12 is beta-1-naphthyl-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 14
- (C) OTHER INFORMATION: /label= Substituted-Ala
/note= "Position 14 is beta-1-naphthyl-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:62:

Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Phe Ala Lys Ala
1 5 10

(2) INFORMATION FOR SEQ ID NO:63:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "KMP.148"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 6
- (C) OTHER INFORMATION: /label= Substituted-Ala
/note= "Position 6 is beta-1-naphthyl-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 12
- (C) OTHER INFORMATION: /label= Substituted-Ala
/note= "Position 12 is beta-1-naphthyl-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:63:

Lys Ser Lys Val Gly Ala Leu Ile Gln Leu Phe Ala Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:64:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "KMP.161"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:64:

Lys Ser Lys Val Lys Ala Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:65:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "KMP.166"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:65:

Lys Ser Lys Val Gly Val Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:66:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 14 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.222"
- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 6 & 14
 - (C) OTHER INFORMATION: /label= Substituted-Ala
/note= "Positions 6 and 14 are beta-1-naphthyl-substituted."
- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:66:

Lys Ser Lys Val Gly Ala Leu Ile Gln Leu Phe His Lys Ala
 1 5 10

(2) INFORMATION FOR SEQ ID NO:67:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 14 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.223"
- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 6 & 10
 - (C) OTHER INFORMATION: /label= Substituted-Ala
/note= "Positions 6 & 10 are beta-1-naphthyl-substituted."
- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:67:

Lys Ser Lys Val Gly Ala Leu Ile Gln Ala Phe His Lys Lys
 1 5 10

(2) INFORMATION FOR SEQ ID NO:68:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.224"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 6
- (C) OTHER INFORMATION: /label= Substituted-Ala
/note= "Position 6 is beta-1-naphthyl-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 9
- (C) OTHER INFORMATION: /label= Substituted-Phe
/note= "Position 9 is para-amino-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:68:

Lys	Ser	Lys	Val	Gly	Ala	Leu	Ile	Phe	Leu	Phe	His	Lys	Lys
1				5					10				

(2) INFORMATION FOR SEQ ID NO:69:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.225"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 6
- (C) OTHER INFORMATION: /label= Substituted-Ala
/note= "Position 6 is beta-1-naphthyl-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 5
- (C) OTHER INFORMATION: /label= Substituted-Phe
/note= "Position 5 is para-amino-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

00049306400

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:69:

Lys Ser Lys Val Phe Ala Leu Ile Gln Leu Phe His Lys Lys
 1 5 10

(2) INFORMATION FOR SEQ ID NO:70:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.226"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 6
- (C) OTHER INFORMATION: /label= Substituted-Ala
 /note= "Position 6 is beta-1-naphthyl-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:70:

Lys Ser Lys Val Gly Ala Leu Ile Gln Leu Trp His Lys Lys
 1 5 10

(2) INFORMATION FOR SEQ ID NO:71:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.227"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 10 & 14
- (C) OTHER INFORMATION: /label= Substituted-Ala
 /note= "Positions 10 & 14 are beta-1-naphthyl-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:71:

Lys Ser Lys Val Gly Trp Leu Ile Gln Ala Phe His Lys Ala

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 14 amino acids
 (B) TYPE: amino acid
 (D) TOPOLOGY: linear

```
(ix) FEATURE:
      (A) NAME/KEY: misc_feature
      (D) OTHER INFORMATION: "XMP.228"
```

```
(ix) FEATURE:
      (A) NAME/KEY: Modified-site
      (B) LOCATION: 9
      (C) OTHER INFORMATION: /label= Substituted-Phe
                             /note= "Position 9 is para-amino-substituted."
```

```
(ix) FEATURE:
      (A) NAME/KEY: Modified-site
      (B) LOCATION: 14
      (C) OTHER INFORMATION: /label= Substituted-Ala
                             /note= "Position 14 is beta-L-naphthyl-substituted."
```

[illegible]

Lys Ser Lys Val Gly Trp Leu Ile Phe Leu Phe His Lys Ala
1 5 10

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 14 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

```
(ix) FEATURE:
      (A) NAME/KEY: misc_feature
      (D) OTHER INFORMATION: "XMP.229"
```

```
(ix) FEATURE:
      (A) NAME/KEY: Modified-site
      (B) LOCATION: 5
      (C) OTHER INFORMATION: /label= Substituted-Ala
                           /note= "Position 5 is para-amino-substituted."
```

```
(ix) FEATURE:
      (A) NAME/KEY: Modified-site
      (B) LOCATION: 14
      (C) OTHER INFORMATION: /label= Substituted-Ala
                           /note= "Position 14 is beta-1-naphthyl-substituted."
```

[illegible]

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:73:

Lys Ser Lys Val Phe Trp Leu Ile Gln Leu Phe His Lys Ala
 1 5 10

(2) INFORMATION FOR SEQ ID NO:74:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 14 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.230"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 14
 - (C) OTHER INFORMATION: /label= Substituted-Ala
/note= "Position 14 is beta-1-naphthyl-substituted."

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:74:

Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Trp His Lys Ala
 1 5 10

(2) INFORMATION FOR SEQ ID NO:75:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 14 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.231"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 10 & 12
 - (C) OTHER INFORMATION: /label= Substituted-Ala
/note= "Positions 10 & 12 are beta-1-naphthyl-substituted."

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus

(D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:75:

Lys Ser Lys Val Gly Trp Leu Ile Gln Ala Phe Ala Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:76:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.232"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 9
- (C) OTHER INFORMATION: /label= Substituted-Phe
/note= "Position 9 is para-amino-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 12
- (C) OTHER INFORMATION: /label= Substituted-Ala
/note= "Position 12 is beta-1-naphthyl-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:76:

Lys Ser Lys Val Gly Trp Leu Ile Phe Leu Phe Ala Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:77:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.233"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 5
- (C) OTHER INFORMATION: /label= Substituted-Phe
/note= "Position 5 is para-amino-substituted."

(ix) FEATURE:
 (A) NAME/KEY: Modified-site
 (B) LOCATION: 12
 (C) OTHER INFORMATION: /label= Substituted-Ala
 /note= "Position 12 is beta-1-naphthyl-substituted."

(ix) FEATURE:
 (A) NAME/KEY: Modified-site
 (B) LOCATION: C-Terminus
 (D) OTHER INFORMATION: /label= Amidation
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:77:

Lys Ser Lys Val Phe Trp Leu Ile Gln Leu Phe Ala Lys Lys -
 1 5 10

(2) INFORMATION FOR SEQ ID NO:78:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 14 amino acids
 (B) TYPE: amino acid
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:
 (A) NAME/KEY: misc feature
 (D) OTHER INFORMATION: "XMP.234"

(ix) FEATURE:
 (A) NAME/KEY: Modified-site
 (B) LOCATION: 12
 (C) OTHER INFORMATION: /label= Substituted-Ala
 /note= "Position 12 is beta-1-naphthyl-substituted."

(ix) FEATURE:
 (A) NAME/KEY: Modified-site
 (B) LOCATION: C-Terminus
 (D) OTHER INFORMATION: /label= Amidation
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:78:

Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Trp Ala Lys Lys
 1 5 10

(2) INFORMATION FOR SEQ ID NO:79:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 14 amino acids
 (B) TYPE: amino acid
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:
 (A) NAME/KEY: misc feature
 (D) OTHER INFORMATION: "XMP.235"

(ix) FEATURE:
 (A) NAME/KEY: Modified-site
 (B) LOCATION: 9

(C) OTHER INFORMATION: /label= Substituted-Phe
/note= "Position 9 is para-amino-substituted."

(ix) FEATURE:

(A) NAME/KEY: Modified-site
(B) LOCATION: 10
(C) OTHER INFORMATION: /label= Substituted-Ala
/note= "Position 10 is beta-1-naphthyl-substituted."

(ix) FEATURE:

(A) NAME/KEY: Modified-site
(B) LOCATION: C-Terminus
(D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:79:

Lys Ser Lys Val Gly Trp Leu Ile Phe Ala Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:80:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 14 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: misc_feature
(D) OTHER INFORMATION: "XMP.236"

(ix) FEATURE:

(A) NAME/KEY: Modified-site
(B) LOCATION: 5
(C) OTHER INFORMATION: /label= Substituted-Phe
/note= "Position 5 is para-amino-substituted."

(ix) FEATURE:

(A) NAME/KEY: Modified-site
(B) LOCATION: 10
(C) OTHER INFORMATION: /label= Substituted-Ala
/note= "Position 10 is beta-1-naphthyl-substituted."

(ix) FEATURE:

(A) NAME/KEY: Modified-site
(B) LOCATION: C-Terminus
(D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:80:

Lys Ser Lys Val Phe Trp Leu Ile Gln Ala Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:81:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 14 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

"001190" 001190

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.237"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 10
- (C) OTHER INFORMATION: /label= Substituted-Ala
/note= "Position 10 is beta-1-naphthyl-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:81:

Lys Ser Lys Val Gly Trp Leu Ile Gln Ala Trp His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:82:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.238"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 5
- (C) OTHER INFORMATION: /label= Substituted-Phe
/note= "Position 5 is para-amino-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 9
- (C) OTHER INFORMATION: /label= Substituted-Phe
/note= "Position 9 is para-amino-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:82:

Lys Ser Lys Val Phe Trp Leu Ile Phe Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:83:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids

- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc feature
- (D) OTHER INFORMATION: "KMP.239"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 9
- (C) OTHER INFORMATION: /label= Substituted-Phe
/note= "Position 9 is para-amino-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:83:

Lys Ser Lys Val Gly Trp Leu Ile Phe Leu Trp His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:84:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc feature
- (D) OTHER INFORMATION: "KMP.240"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 5
- (C) OTHER INFORMATION: /label= Substituted-Phe
/note= "Position 5 is para-amino-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:84:

Lys Ser Lys Val Phe Trp Leu Ile Gln Leu Trp His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:85:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ix) FEATURE:

(ix) FEATURE:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:85:

(2) INFORMATION FOR SEQ ID NO:86:

(i) SEQUENCE CHARACTERISTICS:

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(ix) FEATURE:

(A) NAME/KEY: Modified-site
(B) LOCATION: 6
(C) OTHER INFORMATION: /label= Substituted-Ala
/note= "Position 6 is D-beta-2-naphthyl-substituted."

(ix) FEATURE:

(A) NAME/KEY: Modified-site
(B) LOCATION: C-Terminus
(D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:86:

(2) INFORMATION FOR SEQ ID NO:87:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 14 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: misc_feature
(D) OTHER INFORMATION: "XMP.243"

(ix) FEATURE:

(A) NAME/KEY: Modified-site
(B) LOCATION: 6

(C) OTHER INFORMATION: /label= Substituted-Ala
/note= "Position 6 is D-beta-2-naphthyl-substituted."

(ix) FEATURE:

(A) NAME/KEY: Modified-site
(B) LOCATION: C-Terminus
(D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:87:

Lys Ser Lys Val Gly Ala Leu Ile Gln Leu Trp His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:88:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 14 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: misc_feature
(D) OTHER INFORMATION: "XMP.244"

(ix) FEATURE:

(A) NAME/KEY: Modified-site
(B) LOCATION: 6
(C) OTHER INFORMATION: /label= Substituted-Ala
/note= "Position 6 is D-beta-2-naphthyl-substituted."

(ix) FEATURE:

(A) NAME/KEY: Modified-site
(B) LOCATION: C-Terminus
(D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:88:

Lys Ser Lys Val Gly Ala Leu Ile Leu Leu Trp His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:89:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 14 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: misc_feature
(D) OTHER INFORMATION: "XMP.249"

(ix) FEATURE:

(A) NAME/KEY: Modified-site
(B) LOCATION: C-Terminus
(D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

"XMP.249" data-bbox="38 377 62 596">"XMP.249"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:89:

Lys Ser Lys Val Gly Gly Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:90:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.250"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:90:

Lys Ser Lys Val Gly Leu Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:91:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.251"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:91:

Lys Ser Lys Val Gly Ile Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:92:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc feature
- (D) OTHER INFORMATION: "XMP.252"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 6
- (D) OTHER INFORMATION: /label= D-Ala
/note= "Position 6 is D-alanine"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:92:

Lys Ser Lys Val Gly Ala Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:93:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc feature
- (D) OTHER INFORMATION: "XMP.253"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 6
- (D) OTHER INFORMATION: /label= D-Val
/note= "Position 6 is D-valine"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:93:

Lys Ser Lys Val Gly Val Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:94:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc feature
- (D) OTHER INFORMATION: "XMP.254"

[illegible]

(2) INFORMATION FOR SEQ ID NO:95:

(ii) MOLECULE TYPE: peptide

```
(ix) FEATURE:
      (A) NAME/KEY: Modified-site
      (B) LOCATION: 6
      (D) OTHER INFORMATION: /label= alpha-aba
                           /note= "Position 6 is alpha-aminobutyric acid"
```

[illegible]

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:95:

(2) INFORMATION FOR SEQ ID NO:96:

(ii) MOLECULE TYPE: peptide

```
(ix) FEATURE:
      (A) NAME/KEY: Modified-site
      (B) LOCATION: 6
```


- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:98:

Lys Ser Lys Val Gly Gly Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:99:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 14 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.259"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 6
 - (D) OTHER INFORMATION: /label= N-methyl-G
/note= "Position 6 is N-Methyl-glycine"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:99:

Lys Ser Lys Val Gly Gly Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:100:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 14 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.260"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 6
 - (D) OTHER INFORMATION: /label= N-methyl-V
/note= "Position 6 is N-Methyl-valine"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus

(xi) SEQUENCE DESCRIPTION: SEO ID NO:100:

(2) INFORMATION FOR SEO ID NO:101:

(ii) MOLECULE TYPE: peptide

[illegible][illegible]

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:101:

Lys Ser Lys Val Gly Leu Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEO ID NO:102:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 14 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

```
(ix) FEATURE:
      (A) NAME/KEY: misc_feature
      (D) OTHER INFORMATION: "XMP.252"
```

[illegible]

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:102:

Lys Ser Lys Val Gly Trp Leu Ile Asn Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEO ID NO:103:

Lys Val Gly Trp Leu Ile Gln Leu Phe His Lys Lys
20 25

(2) INFORMATION FOR SEQ ID NO:111:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 28 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.271"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:111:

Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Phe His Lys Lys Lys Ser
1 5 10 15

Lys Val Gly Trp Leu Ile Leu Leu Phe His Lys Lys
20 25

(2) INFORMATION FOR SEQ ID NO:112:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 28 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.272"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:112:

Lys Ser Lys Val Gly Trp Leu Ile Leu Leu Phe His Lys Lys Lys Ser
1 5 10 15

Lys Val Gly Trp Leu Ile Leu Leu Phe His Lys Lys
20 25

(2) INFORMATION FOR SEQ ID NO:113:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 28 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.273"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:113:

Lys Ser Lys Val Gly Trp Leu Ile Phe Leu Phe His Lys Lys Lys Ser
1 5 10 15

Lys Val Gly Trp Leu Ile Gln Leu Phe His Lys Lys
20 25

(2) INFORMATION FOR SEQ ID NO:114:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 28 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.274"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:114:

Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Phe His Lys Lys Lys Ser
1 5 10 15

Lys Val Gly Trp Leu Ile Phe Leu Phe His Lys Lys
20 25

(2) INFORMATION FOR SEQ ID NO:115:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 28 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.275"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:115:

(2) INFORMATION FOR SEQ ID NO:116:

(ii) MOLECULE TYPE: peptide

[illegible]

Lys Ser Lys Val Lys Phe Leu Ile Lys Leu Phe His Lys Lys
1 5 10

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 13 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

```
(ix) FEATURE:
      (A) NAME/KEY: misc_feature
      (D) OTHER INFORMATION: "XMP.284"
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:117:

(2) INFORMATION FOR SEQ ID NO:113:

- [illegible]

- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:120:

Ser Lys Val Lys Trp Leu Ile Gln Leu Phe His
1 5 10

(2) INFORMATION FOR SEQ ID NO:121:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 11 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.288"
- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:121:

Lys Val Lys Trp Leu Ile Gln Leu Phe His Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:122:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 11 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.289"
- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:122:

Val Lys Trp Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:123:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 10 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.290"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:123:

Ser Lys Val Lys Trp Leu Ile Gln Leu Phe
1 5 10

(2) INFORMATION FOR SEQ ID NO:124:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 10 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.291"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:124:

Lys Val Lys Trp Leu Ile Gln Leu Phe His
1 5 10

(2) INFORMATION FOR SEQ ID NO:125:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 10 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.292"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:125:

Val Lys Trp Leu Ile Gln Leu Phe His Lys

10

(2) INFORMATION FOR SEQ ID NO:126:

- ```
(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 10 amino acids
 (B) TYPE: amino acid
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:
 (A) NAME/KEY: misc feature
 (D) OTHER INFORMATION: "XMP.293"

(ix) FEATURE:
 (A) NAME/KEY: Modified-site
 (B) LOCATION: C-Terminus
 (D) OTHER INFORMATION: /label= Amidation
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:126:

Lys Trp Leu Ile Gln Leu Phe His Lys Lys
1 5 10
```

(2) INFORMATION FOR SEQ ID NO:127:

- ```
(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 9 amino acids
    (B) TYPE: amino acid
    (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:
    (A) NAME/KEY: misc_feature
    (D) OTHER INFORMATION: "XMP.294"

(ix) FEATURE:
    (A) NAME/KEY: Modified-site
    (B) LOCATION: C-Terminus
    (D) OTHER INFORMATION: /label= Amidation
                          /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:127:

Ser Lys Val Lys Trp Leu Ile Gln Leu
 1           5
```

(2) INFORMATION FOR SEQ ID NO:128:

- ```
(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 9 amino acids
 (B) TYPE: amino acid
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:
 (A) NAME/KEY: misc_feature
 (D) OTHER INFORMATION: "IMP.295"
```



(xi) SEQUENCE DESCRIPTION: SEQ ID NO:123:

(2) INFORMATION FOR SEQ ID NO:129:

(ii) MOLECULE TYPE: peptide

[illegible]

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:129:

(2) INFORMATION FOR SEQ ID NO:130:

(ii) MOLECULE TYPE: peptide

[illegible]

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:130:

(2) INFORMATION FOR SEQ ID NO:131:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids

(B) TYPE: amino acid  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: misc\_feature  
(D) OTHER INFORMATION: "KMP.298"

(ix) FEATURE:

(A) NAME/KEY: Modified-site  
(B) LOCATION: C-Terminus  
(D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:131:

Trp Leu Ile Gln Leu Phe His Lys Lys  
1 5

(2) INFORMATION FOR SEQ ID NO:132:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 8 amino acids  
(B) TYPE: amino acid  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: misc\_feature  
(D) OTHER INFORMATION: "KMP.299"

(ix) FEATURE:

(A) NAME/KEY: Modified-site  
(B) LOCATION: C-Terminus  
(D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:132:

Ser Lys Val Lys Trp Leu Ile Gln  
1 5

(2) INFORMATION FOR SEQ ID NO:133:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 8 amino acids  
(B) TYPE: amino acid  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: misc\_feature  
(D) OTHER INFORMATION: "KMP.300"

(ix) FEATURE:

(A) NAME/KEY: Modified-site  
(B) LOCATION: C-Terminus  
(D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

TOP SECRET CONFIDENTIAL

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:133:

Lys Val Lys Trp Leu Ile Gln Leu  
1 5

(2) INFORMATION FOR SEQ ID NO:134:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 8 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.301"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:134:

Val Lys Trp Leu Ile Gln Leu Phe  
1 5

(2) INFORMATION FOR SEQ ID NO:135:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 8 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.302"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:135:

Lys Trp Leu Ile Gln Leu Phe His  
1 5

(2) INFORMATION FOR SEQ ID NO:136:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 8 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.303"

- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: C-Terminus
  - (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:136:

Trp Leu Ile Gln Leu Phe His Lys  
1 5

- (2) INFORMATION FOR SEQ ID NO:137:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 8 amino acids
  - (B) TYPE: amino acid
  - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
  - (A) NAME/KEY: misc\_feature
  - (D) OTHER INFORMATION: "XMP.304"

- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: C-Terminus
  - (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:137:

Leu Ile Gln Leu Phe His Lys Lys  
1 5

- (2) INFORMATION FOR SEQ ID NO:138:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 7 amino acids
  - (B) TYPE: amino acid
  - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
  - (A) NAME/KEY: misc\_feature
  - (D) OTHER INFORMATION: "XMP.305"

- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: C-Terminus
  - (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:138:

Ser Lys Val Lys Trp Leu Ile  
1 5

- (2) INFORMATION FOR SEQ ID NO:139:

F001F50:001F50

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 7 amino acids  
 (B) TYPE: amino acid  
 (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:  
 (A) NAME/KEY: misc\_feature  
 (D) OTHER INFORMATION: "XMP.306"
- (ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: C-Terminus  
 (D) OTHER INFORMATION: /label= Amidation  
 /note= "The C-Terminus is Amidated"
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:139:
- Lys Val Lys Trp Leu Ile Gln  
 1 5
- (2) INFORMATION FOR SEQ ID NO:140:
- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 7 amino acids  
 (B) TYPE: amino acid  
 (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:  
 (A) NAME/KEY: misc\_feature  
 (D) OTHER INFORMATION: "XMP.307"
- (ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: C-Terminus  
 (D) OTHER INFORMATION: /label= Amidation  
 /note= "The C-Terminus is Amidated"
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:140:
- Val Lys Trp Leu Ile Gln Leu  
 1 5
- (2) INFORMATION FOR SEQ ID NO:141:
- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 7 amino acids  
 (B) TYPE: amino acid  
 (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:  
 (A) NAME/KEY: misc\_feature  
 (D) OTHER INFORMATION: "XMP.308"
- (ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: C-Terminus  
 (D) OTHER INFORMATION: /label= Amidation

/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:141:

Lys Trp Leu Ile Gln Leu Phe  
1 5

(2) INFORMATION FOR SEQ ID NO:142:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 7 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.309"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:142:

Trp Leu Ile Gln Leu Phe His  
1 5

(2) INFORMATION FOR SEQ ID NO:143:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 7 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.310"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:143:

Leu Ile Gln Leu Phe His Lys  
1 5

(2) INFORMATION FOR SEQ ID NO:144:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 7 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

"XMP.309" "XMP.310"

## (ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.311"

## (ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:144:

Ile Gln Leu Phe His Lys Lys  
1 5

## (2) INFORMATION FOR SEQ ID NO:145:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 6 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: peptide

## (ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.312"

## (ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:145:

Ser Lys Val Lys Trp Leu  
1 5

## (2) INFORMATION FOR SEQ ID NO:146:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 6 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: peptide

## (ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.313"

## (ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:146:

Lys Val Lys Trp Leu Ile  
1 5

147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000

(2) INFORMATION FOR SEQ ID NO:147:

- ```
(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 6 amino acids
    (B) TYPE: amino acid
    (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:
    (A) NAME/KEY: misc_feature
    (D) OTHER INFORMATION: "XMP.314"

(ix) FEATURE:
    (A) NAME/KEY: Modified-site
    (B) LOCATION: C-Terminus
    (D) OTHER INFORMATION: /label= Amidation
                          /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:147:

Val Lys Trp Leu Ile Gln
 1             5
```

(2) INFORMATION FOR SEQ ID NO:148:

- ```
(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 6 amino acids
 (B) TYPE: amino acid
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:
 (A) NAME/KEY: misc feature
 (D) OTHER INFORMATION: "XMP.315"

(ix) FEATURE:
 (A) NAME/KEY: Modified-site
 (B) LOCATION: C-Terminus
 (D) OTHER INFORMATION: /label= Amidation
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:148:

Lys Trp Leu Ile Gln Leu
1 5
```

(2) INFORMATION FOR SEQ ID NO:149:

- ```
(i) SEQUENCE CHARACTERISTICS:
      (A) LENGTH: 6 amino acids
      (B) TYPE: amino acid
      (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:
      (A) NAME/KEY: misc_feature
      (D) OTHER INFORMATION: "XMP.316"

(ix) FEATURE:
      (A) NAME/KEY: Modified-site
```


- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:149:

Trp Leu Ile Gln Leu Phe
1 5

(2) INFORMATION FOR SEQ ID NO:150:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 6 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.317"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:150:

Leu Ile Gln Leu Phe His
1 5

(2) INFORMATION FOR SEQ ID NO:151:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 6 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.318"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:151:

Ile Gln Leu Phe His Lys
1 5

(2) INFORMATION FOR SEQ ID NO:152:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 6 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear

149: 00110000

- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.319"
- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:152:

Gln Leu Phe His Lys Lys
1 5

(2) INFORMATION FOR SEQ ID NO:153:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 5 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.320"
- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:153:

Trp Leu Ile Gln Leu
1 5

(2) INFORMATION FOR SEQ ID NO:154:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 6 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.321"
- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:154:

Trp Leu Ile Gln Leu Lys

(ix) FEATURE:

(3) LOCATION: C-Terminus

```

/label= "Amidation"
/note= "The C-Terminus is Amidated"

```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:157:

1

5

(2) INFORMATION FOR SEO ID NO:158:

(A) LENGTH: 7 amino acids

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(D) OTHER INFORMATION: "XMP.325"

(ix) FEATURE:

(B) LOCATION: C-Terminus

(D) OTHER INFORMATION: /label= Amidation

```
/note= "The C-Terminus is Amidated"
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:158:

1

5

(2) INFORMATION FOR SEO ID NO:159:

(A) LENGTH: 8 amino acids

(B) TYPE: amino acid

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(D) OTHER INFORMATION: "XMP.326"

(ix) FEATURE:

(3) LOCATION: C-Terminus

(D) OTHER INFORMATION: /label= Amidation

```
/note= "The C-Terminus is Amidated"
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:159:

1

5

(2) INFORMATION FOR SEQ ID NO:160:

(A) LENGTH: 9 amino acids

- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.327"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:160:

Lys Lys Trp Leu Ile Gln Leu Lys Lys
1 5

(2) INFORMATION FOR SEQ ID NO:161:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 4 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.330"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:161:

Trp Leu Ile Gln
1

(2) INFORMATION FOR SEQ ID NO:162:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 9 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.331"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 1
 - (D) OTHER INFORMATION: /label= Acetylated
/note= "Position 1 is acetylated"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:162:

Lys Lys Trp Leu Ile Gln Leu Lys Lys
1 5

(2) INFORMATION FOR SEQ ID NO:163:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 9 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.332"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 1-9
 - (D) OTHER INFORMATION: /label= D-Amino Acids
/note= "Positions 1-9 are D-amino acids"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:163:

Lys Lys Leu Gln Ile Leu Trp Lys Lys
1 5

(2) INFORMATION FOR SEQ ID NO:164:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 9 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.333"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 1
 - (D) OTHER INFORMATION: /label= D-Lys
/note= "Position 1 is D-lysine"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:164:

INFORMATION FOR SEQ ID NO:165:

(ii) MOLECULE TYPE: peptide

[illegible][illegible]

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:165:

(2) INFORMATION FOR SEQ ID NO:166:

(ii) MOLECULE TYPE: peptide

```
(ix) FEATURE:
      (A) NAME/KEY: misc_feature
      (D) OTHER INFORMATION: "XMP.335"
```

[illegible]

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:166:

Pro Lys Trp Leu Ile Gln Leu Lys Lys
1 5

(2) INFORMATION FOR SEQ ID NO:167:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 9 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.336"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:167:

Arg Arg Trp Leu Ile Gln Leu Arg Arg
1 5

(2) INFORMATION FOR SEQ ID NO:168:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 9 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.337"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:168:

His His Trp Leu Ile Gln Leu His His
1 5

(2) INFORMATION FOR SEQ ID NO:169:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 9 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.338"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 1, 2, 8 & 9
 - (D) OTHER INFORMATION: /label= Orn

/note= "Positions 1, 2, 8 & 9 are Ornithine"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:159:

Xaa Xaa Trp Leu Ile Gln Leu Xaa Xaa
1 5

(2) INFORMATION FOR SEQ ID NO:170:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.339"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 1, 2, 8 & 9
- (D) OTHER INFORMATION: /label= Dbu
/note= "Positions 1, 2, 8 & 9 are Diaminobutyric acid"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:170:

Xaa Xaa Trp Leu Ile Gln Leu Xaa Xaa
1 5

(2) INFORMATION FOR SEQ ID NO:171:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.340"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 1, 2, 8 & 9
- (C) OTHER INFORMATION: /label= Substituted-Phe
/note= "Positions 1, 2, 8 & 9 are para-amino-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:171:

Phe Phe Trp Leu Ile Gln Leu Phe Phe
1 5

(2) INFORMATION FOR SEQ ID NO:172:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 9 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.341"
- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 1, 2, 8 & 9
 - (C) OTHER INFORMATION: /label= Substituted-Ala
/note= "The alanine at positions 1, 2, 8 & 9 is
pyridyl-substituted."
- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:172:

Ala Ala Trp Leu Ile Gln Leu Ala Ala
1 5

(2) INFORMATION FOR SEQ ID NO:173:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 9 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.342"
- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 1, 2, 8 & 9
 - (D) OTHER INFORMATION: /label= D-Lys
/note= "Positions 1, 2, 8 & 9 are D-lysine"
- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus

(D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:173:

Lys Lys Trp Leu Ile Gln Leu Lys Lys
1 5

(2) INFORMATION FOR SEQ ID NO:174:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.343"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:174:

Lys Lys Val Leu Ile Gln Leu Lys Lys
1 5

(2) INFORMATION FOR SEQ ID NO:175:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.344"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:175:

Lys Lys Trp Ala Ile Gln Leu Lys Lys
1 5

(2) INFORMATION FOR SEQ ID NO:176:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

173-176-177-178-179-180-181-182-183-184-185-186-187-188-189-190-191-192-193-194-195-196-197-198-199-200

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.345"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:176:

Lys Lys Trp Leu Ile Gln Ala Lys Lys
1 5

(2) INFORMATION FOR SEQ ID NO:177:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.346"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 3
- (C) OTHER INFORMATION: /label= Substituted-Phe
/note= "The phenylalanine at position 3 is
p-amino-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:177:

Lys Lys Phe Leu Ile Gln Leu Lys Lys
1 5

(2) INFORMATION FOR SEQ ID NO:178:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.347"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site

- (B) LOCATION: 3
- (C) OTHER INFORMATION: /label= Substituted-Ala
/note= "Position 3 is D-beta-2-naphthyl-substituted."

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:178:

Lys Lys Ala Leu Ile Leu Leu Lys Lys
1 5

- (2) INFORMATION FOR SEQ ID NO:179:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 10 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.348"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:179:

Lys Lys Lys Trp Leu Ile Gln Leu Lys Lys
1 5 10

- (2) INFORMATION FOR SEQ ID NO:180:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 10 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.349"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:180:

Lys Lys Trp Leu Ile Gln Leu Lys Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:181:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 11 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.350"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:181:

Lys Lys Lys Trp Leu Ile Gln Leu Lys Lys Lys
 1 5 10

(2) INFORMATION FOR SEQ ID NO:182:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 10 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.351"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:182:

Lys Lys Trp Leu Ile Gln Leu Phe Lys Lys
 1 5 10

(2) INFORMATION FOR SEQ ID NO:183:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 11 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.352"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:133:

(2) INFORMATION FOR SEQ ID NO:134:

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:134:

(2) INFORMATION FOR SEQ ID NO:185:

(ii) MOLECULE TYPE: peptide

```
(ix) FEATURE:
      (A) NAME/KEY: Modified-site
      (B) LOCATION: 1
      (D) OTHER INFORMATION: /label= Acetylated
                           /note= "Position 1 is acetylated"
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:135:

(2) INFORMATION FOR SEQ ID NO:136:

(ii) MOLECULE TYPE: peptide

```
(ix) FEATURE:
      (A) NAME/KEY: misc_feature
      (D) OTHER INFORMATION: "XMP.355"
```

(ix) FEATURE:
 (A) NAME/KEY: Modified-site
 (B) LOCATION: C-Terminus
 (D) OTHER INFORMATION: /label= Amidation
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:186:

Pro Trp Leu Ile Gln Leu Phe His Lys Lys
 1 5 10

(2) INFORMATION FOR SEQ ID NO:187:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 10 amino acids
 (B) TYPE: amino acid
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:
 (A) NAME/KEY: misc_feature
 (D) OTHER INFORMATION: "XMP.356"

(ix) FEATURE:
 (A) NAME/KEY: Modified-site
 (B) LOCATION: 1
 (D) OTHER INFORMATION: /label= Acetylated
 /note= "Position 1 is acetylated"

(ix) FEATURE:
 (A) NAME/KEY: Modified-site
 (B) LOCATION: C-Terminus
 (D) OTHER INFORMATION: /label= Amidation
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:187:

Pro Trp Leu Ile Gln Leu Phe His Lys Lys
 1 5 10

(2) INFORMATION FOR SEQ ID NO:188:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 10 amino acids
 (B) TYPE: amino acid
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:
 (A) NAME/KEY: misc_feature
 (D) OTHER INFORMATION: "XMP.357"

(ix) FEATURE:
 (A) NAME/KEY: Modified-site
 (B) LOCATION: C-Terminus
 (D) OTHER INFORMATION: /label= Amidation
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:188:

Lys Trp Leu Ile Gln Leu Phe His Lys Pro

10

```
(i) SEQUENCE CHARACTERISTICS:
  (A) LENGTH: 11 amino acids
  (B) TYPE: amino acid
  (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:
  (A) NAME/KEY: misc_feature
  (D) OTHER INFORMATION: "XMP.358"

(ix) FEATURE:
  (A) NAME/KEY: Modified-site
  (B) LOCATION: C-Terminus
  (D) OTHER INFORMATION: /label= Amidation
                        /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:189:

Lys Lys Trp Leu Ile Gln Leu Phe His Lys Pro
1           5           10
```

```
(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 10 amino acids
    (B) TYPE: amino acid
    (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:
    (A) NAME/KEY: misc_feature
    (D) OTHER INFORMATION: "KMP.359"

(ix) FEATURE:
    (A) NAME/KEY: Modified-site
    (B) LOCATION: 1
    (C) OTHER INFORMATION: /label= D-Cys
                          /note= "Position 1 is D-cysteine."

(ix) FEATURE:
    (A) NAME/KEY: Modified-site
    (B) LOCATION: C-Terminus
    (D) OTHER INFORMATION: /label= Amidation
                          /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:190:

Cys Trp Leu Ile Gln Leu Phe His Lys Lys
1           5           10
```

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 9 amino acids
 (B) TYPE: amino acid
 (D) TOPOLOGY: circular

(ix) FEATURE:

(ix) FEATURE:

(ix) FEATURE:

(ix) FEATURE:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:191:

(2) INFORMATION FOR SEQ ID NO:192:

(i) SEQUENCE CHARACTERISTICS:

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(ix) FEATURE:

(ix) FEATURE:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:192:

(2) INFORMATION FOR SEQ ID NO:193:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 11 amino acids

(ii) MOLECULE TYPE: peptide

[illegible]

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:193:

(2) INFORMATION FOR SEO ID NO:194:

(ii) MOLECULE TYPE: peptide

```
(ix) FEATURE:
      (A) NAME/KEY: Modified-site
      (B) LOCATION: 1, 9 & 10
      (C) OTHER INFORMATION: /label= D-Lys
                             /note= "Positions 1, 9 & 10 are D-lysine."
```

[illegible][illegible]

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:194:

Lys Trp Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:195:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 10 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "KMP.364"
- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 1
 - (D) OTHER INFORMATION: /label= Acetylated
/note= "Position 1 is acetylated"
- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 1, 9 & 10
 - (C) OTHER INFORMATION: /label= D-Lys
/note= "Positions 1, 9 & 10 are D-lysine."
- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 2
 - (C) OTHER INFORMATION: /label= D-Trp
/note= "Position 2 is D-tryptophan."
- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:195:

Lys	Trp	Leu	Ile	Gln	Leu	Phe	His	Lys	Lys
1				5					10

(2) INFORMATION FOR SEQ ID NO:196:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 10 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "KMP.365"
- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 1-10
 - (D) OTHER INFORMATION: /label= D-Amino Acids
/note= "Positions 1-10 are D-amino acids"
- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation

(2) INFORMATION FOR SEQ ID NO:197:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 10 amino acids
 (B) TYPE: amino acid
 (D) TOPOLOGY: linear

```
(ix) FEATURE:
      (A) NAME/KEY: misc_feature
      (D) OTHER INFORMATION: "XMP.366"
```

[illegible]

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:197:

(2) INFORMATION FOR SEQ ID NO:198:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 10 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

```
(ix) FEATURE:
      (A) NAME/KEY: misc_feature
      (D) OTHER INFORMATION: "XMP.367"
```

[illegible]

(ix) FEATURE:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:193:

(2) INFORMATION FOR SEQ ID NO:199:

(ii) MOLECULE TYPE: peptide

```
(ix) FEATURE:  
      (A) NAME/KEY: Modified-site  
      (B) LOCATION: 1  
      (D) OTHER INFORMATION: /label= Acetylated  
                           /note= "Position 1 is acetylated"
```

[illegible][illegible]

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:199:

Lys Lys His Phe Leu Gln Ile Leu Trp Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:200:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 10 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

```
(ix) FEATURE:
      (A) NAME/KEY: misc_feature
      (D) OTHER INFORMATION: "YCP.369"
```

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 5
- (D) OTHER INFORMATION: /label= Orn

/note= "Position 5 is Ornithine"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:200:

Lys Trp Leu Ile Xaa Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:201:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 10 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.370"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 5
 - (D) OTHER INFORMATION: /label= Orn
/note= "Position 5 is Ornithine"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 1
 - (D) OTHER INFORMATION: /label= Acetylated
/note= "Position 1 is acetylated"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:201:

Lys Trp Leu Ile Xaa Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:202:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 10 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.371"

- (ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 5
- (D) OTHER INFORMATION: /label= Dbu
/note= "Position 5 is Diaminobutyric acid"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:202:

Lys Trp Leu Ile Xaa Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:203:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 10 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.372"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 5
- (D) OTHER INFORMATION: /label= Dbu
/note= "Position 5 is Diaminobutyric acid"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 1
- (D) OTHER INFORMATION: /label= Acetylated
/note= "Position 1 is acetylated"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:203:

Lys Trp Leu Ile Xaa Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:204:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 10 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature

[illegible]

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:204:

(2) INFORMATION FOR SEQ ID NO:205:

(ii) MOLECULE TYPE: cDNA

```
(ix) FEATURE:
      (A) NAME/KEY: mat_peptide
      (B) LOCATION: 124..1491
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:205:

CCT TGC AAC GCG CCG AGA TGG GTG TCC CTG ATG GTG CTC GTC GCC ATA 102
Pro Cys Asn Ala Pro Arg Trp Val Ser Leu Met Val Leu Val Ala Ile
-20 -15 -10

GGC ACC GCC GTG ACA GCG GCC GTC AAC CCT GGC GTC GTG GTC AGG ATC 150
Gly Thr Ala Val Thr Ala Ala Val Asn Pro Gly Val Val Val Arg Ile
-5 1 5

TCC CAG AAG GGC CTG GAC TAC GCC AGC CAG CAG GGG ACG GCC GCT CTG 198
Ser Gln Lys Gly Leu Asp Tyr Ala Ser Gln Gln Gly Thr Ala Ala Leu
10 15 20 25

CAG AAG GAG CTG AAG AGG ATC AAG ATT CCT GAC TAC TCA GAC AGC TTT 246
Gln Lys Glu Leu Lys Arg Ile Lys Ile Pro Asp Tyr Ser Asp Ser Phe
30 35 40

AAG	ATC	AAG	CAT	CTT	GGG	AAG	GGG	CAT	TAT	AGC	TTC	TAC	AGC	ATG	GAC	294
Lys	Ile	Lys	His	Leu	Gly	Lys	Gly	His	Tyr	Ser	Phe	Tyr	Ser	Met	Asp	
			45					50					55			
ATC	CGT	GAA	TTC	CAG	CTT	CCC	AGT	TCC	CAG	ATA	AGC	ATG	GTG	CCC	AAT	342
Ile	Arg	Glu	Phe	Gln	Leu	Pro	Ser	Ser	Gln	Ile	Ser	Met	Val	Pro	Asn	
		60					55					70				
GTG	GGC	CTT	AAG	TTC	TCC	ATC	AGC	AAC	GCC	AAT	ATC	AAG	ATC	AGC	GGG	390
Val	Gly	Leu	Lys	Phe	Ser	Ile	Ser	Asn	Ala	Asn	Ile	Lys	Ile	Ser	Gly	
	75					80					85					
AAA	TGG	AAG	GCA	CAA	AAG	AGA	TTC	TTA	AAA	ATG	AGC	GGC	AAT	TTT	GAC	438
Lys	Trp	Lys	Ala	Gln	Lys	Arg	Phe	Leu	Lys	Met	Ser	Gly	Asn	Phe	Asp	
	90				95					100					105	
CTG	AGC	ATA	GAA	GGC	ATG	TCC	ATT	TCG	GCT	GAT	CTG	AAG	CTG	GGC	AGT	486
Leu	Ser	Ile	Glu	Gly	Met	Ser	Ile	Ser	Ala	Asp	Leu	Lys	Leu	Gly	Ser	
				110					115					120		
AAC	CCC	ACG	TCA	GGC	AAG	CCC	ACC	ATC	ACC	TGC	TCC	AGC	TGC	AGC	AGC	534
Asn	Pro	Thr	Ser	Gly	Lys	Pro	Thr	Ile	Thr	Cys	Ser	Ser	Cys	Ser	Ser	
			125					130					135			
CAC	ATC	AAC	AGT	GTC	CAC	GTG	CAC	ATC	TCA	AAG	AGC	AAA	GTC	GGG	TGG	582
His	Ile	Asn	Ser	Val	His	Val	His	Ile	Ser	Lys	Ser	Lys	Val	Gly	Trp	
		140					145					150				
CTG	ATC	CAA	CTC	TTC	CAC	AAA	AAA	ATT	GAG	TCT	GCG	CTT	CGA	AAC	AAG	630
Leu	Ile	Gln	Leu	Phe	His	Lys	Lys	Ile	Glu	Ser	Ala	Leu	Arg	Asn	Lys	
	155					160					165					
ATG	AAC	AGC	CAG	GTC	TGC	GAG	AAA	GTG	ACC	AAT	TCT	GTA	TCC	TCC	AAG	678
Met	Asn	Ser	Gln	Val	Cys	Glu	Lys	Val	Thr	Asn	Ser	Val	Ser	Ser	Lys	
	170				175					180					185	
CTG	CAA	CCT	TAT	TTC	CAG	ACT	CTG	CCA	GTA	ATG	ACC	AAA	ATA	GAT	TCT	726
Leu	Gln	Pro	Tyr	Phe	Gln	Thr	Leu	Pro	Val	Met	Thr	Lys	Ile	Asp	Ser	
				190					195					200		
GTG	GCT	GGA	ATC	AAC	TAT	GGT	CTG	GTG	GCA	CCT	CCA	GCA	ACC	ACG	GCT	774
Val	Ala	Gly	Ile	Asn	Tyr	Gly	Leu	Val	Ala	Pro	Pro	Ala	Thr	Thr	Ala	
			205					210					215			
GAG	ACC	CTG	GAT	GTA	CAG	ATG	AAG	GGG	GAG	TTT	TAC	AGT	GAG	AAC	CAC	822
Glu	Thr	Leu	Asp	Val	Gln	Met	Lys	Gly	Glu	Phe	Tyr	Ser	Glu	Asn	His	
		220					225					230				
CAC	AAT	CCA	CCT	CCC	TTT	GCT	CCA	CCA	GTG	ATG	GAG	TTT	CCC	GCT	GCC	870
His	Asn	Pro	Pro	Pro	Phe	Ala	Pro	Pro	Val	Met	Glu	Phe	Pro	Ala	Ala	
	235				240						245					
CAT	GAC	CGC	ATG	GTA	TAC	CTG	GGC	CTC	TCA	GAC	TAC	TTC	TTC	AAC	ACA	918
His	Asp	Arg	Met	Val	Tyr	Leu	Gly	Leu	Ser	Asp	Tyr	Phe	Phe	Asn	Thr	
	250				255					260					265	
GCC	GGG	CTT	GTA	TAC	CAA	GAG	GCT	GGG	GTC	TTG	AAG	ATG	ACC	CTT	AGA	966
Ala	Gly	Leu	Val	Tyr	Gln	Glu	Ala	Gly	Val	Leu	Lys	Met	Thr	Leu	Arg	
			270					275						280		
GAT	GAC	ATG	ATT	CCA	AAG	GAG	TCC	AAA	TTT	CGA	CTG	ACA	ACC	AAG	TTC	1014
Asp	Asp	Met	Ile	Pro	Lys	Glu	Ser	Lys	Phe	Arg	Leu	Thr	Thr	Lys	Phe	
			285					290					295			

```

TTT GGA ACC TTC CTA CCT GAG GTG GCC AAG AAG TTT CCC AAC ATG AAG 1062
Phe Gly Thr Phe Leu Pro Glu Val Ala Lys Lys Phe Pro Asn Met Lys
      300                      305                      310

ATA CAG ATC CAT GTC TCA GCC TCC ACC CCG CCA CAC CTG TCT GTG CAG 1110
Ile Gln Ile His Val Ser Ala Ser Thr Pro Pro His Leu Ser Val Gln
      315                      320                      325

CCC ACC GGC CTT ACC TTC TAC CCT GCC GTG GAT GTC CAG GCC TTT GCC 1158
Pro Thr Gly Leu Thr Phe Tyr Pro Ala Val Asp Val Gln Ala Phe Ala
330                      335                      340                      345

GTC CTC CCC AAC TCC TCC CTG GCT TCC CTC TTC CTG ATT GGC ATG CAC 1206
Val Leu Pro Asn Ser Ser Leu Ala Ser Leu Phe Leu Ile Gly Met His
      350                      355                      360

ACA ACT GGT TCC ATG GAG GTC AGC GCC GAG TCC AAC AGG CTT GTT GGA 1254
Thr Thr Gly Ser Met Glu Val Ser Ala Glu Ser Asn Arg Leu Val Gly
      365                      370                      375

GAG CTC AAG CTG GAT AGG CTG CTC CTG GAA CTG AAG CAC TCA AAT ATT 1302
Glu Leu Lys Leu Asp Arg Leu Leu Leu Glu Leu Lys His Ser Asn Ile
      380                      385                      390

GGC CCC TTC CCG GTT GAA TTG CTG CAG GAT ATC ATG AAC TAC ATT GTA 1350
Gly Pro Phe Pro Val Glu Leu Leu Gln Asp Ile Met Asn Tyr Ile Val
      395                      400                      405

CCC ATT CTT GTG CTG CCC AGG GTT AAC GAG AAA CTA CAG AAA GGC TTC 1398
Pro Ile Leu Val Leu Pro Arg Val Asn Glu Lys Leu Gln Lys Gly Phe
410                      415                      420                      425

CCT CTC CCG ACG CCG GCC AGA GTC CAG CTC TAC AAC GTA GTG CTT CAG 1446
Pro Leu Pro Thr Pro Ala Arg Val Gln Leu Tyr Asn Val Val Leu Gln
      430                      435                      440

CCT CAC CAG AAC TTC CTG CTG TTC GGT GCA GAC GTT GTC TAT AAA 1491
Pro His Gln Asn Phe Leu Leu Phe Gly Ala Asp Val Val Tyr Lys
      445                      450                      455

TGAAGGCACC AGGGGTGCCG GGGGCTGTCA GCCGCACCTG TTCCTGATGG GCTGTGGGGC 1551

ACCGGCTGCC TTTCCCAGG GAATCCTCTC CAGATCTTAA CCAAGAGCCC CTTGCAAAC 1611

TCTTCGACTC AGATTCAGAA ATGATCTAAA CACGAGGAAA CATTATTCA 1671
TGGAAAAGTG

CATGGTGTGT ATTTAGGGA TTATGAGCTT CTTTCAAGGG CTAAGGCTGC AGAGATATTT 1731

CCTCCAGGAA TCGTGTTC 1791
ATTGTAACCA AGAAATTTCC ATTTGTGCTT CATGAAAAAA

AACTTCTGGT TTTTTCATG TG 1813

```

(2) INFORMATION FOR SEQ ID NO:206:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:206:

Met -31	Arg -30	Glu	Asn	Met	Ala	Arg -25	Gly	Pro	Cys	Asn	Ala -20	Pro	Arg	Trp	Val
Ser -15	Leu	Met	Val	Leu	Val -10	Ala	Ile	Gly	Thr	Ala -5	Val	Thr	Ala	Ala	Val 1
Asn	Pro	Gly	Val 5	Val	Val	Arg	Ile	Ser 10	Gln	Lys	Gly	Leu	Asp 15	Tyr	Ala
Ser	Gln	Gln 20	Gly	Thr	Ala	Ala	Leu 25	Gln	Lys	Glu	Leu	Lys 30	Arg	Ile	Lys
Ile	Pro 35	Asp	Tyr	Ser	Asp	Ser 40	Phe	Lys	Ile	Lys	His 45	Leu	Gly	Lys	Gly
His 50	Tyr	Ser	Phe	Tyr	Ser 55	Met	Asp	Ile	Arg	Glu 60	Phe	Gln	Leu	Pro	Ser 65
Ser	Gln	Ile	Ser	Met 70	Val	Pro	Asn	Val	Gly 75	Leu	Lys	Phe	Ser	Ile 80	Ser
Asn	Ala	Asn	Ile 85	Lys	Ile	Ser	Gly	Lys 90	Trp	Lys	Ala	Gln	Lys 95	Arg	Phe
Leu	Lys	Met 100	Ser	Gly	Asn	Phe	Asp 105	Leu	Ser	Ile	Glu	Gly 110	Met	Ser	Ile
Ser	Ala 115	Asp	Leu	Lys	Leu	Gly 120	Ser	Asn	Pro	Thr	Ser 125	Gly	Lys	Pro	Thr
Ile 130	Thr	Cys	Ser	Ser	Cys 135	Ser	Ser	His	Ile	Asn 140	Ser	Val	His	Val	His 145
Ile	Ser	Lys	Ser	Lys 150	Val	Gly	Trp	Leu	Ile 155	Gln	Leu	Phe	His	Lys 160	Lys
Ile	Glu	Ser	Ala 165	Leu	Arg	Asn	Lys 170	Met	Asn	Ser	Gln	Val	Cys 175	Glu	Lys
Val	Thr	Asn 180	Ser	Val	Ser	Ser	Lys 185	Leu	Gln	Pro	Tyr	Phe 190	Gln	Thr	Leu
Pro	Val 195	Met	Thr	Lys	Ile	Asp 200	Ser	Val	Ala	Gly	Ile 205	Asn	Tyr	Gly	Leu
Val 210	Ala	Pro	Pro	Ala	Thr 215	Thr	Ala	Glu	Thr	Leu 220	Asp	Val	Gln	Met	Lys 225
Gly	Glu	Phe	Tyr	Ser 230	Glu	Asn	His	His 235	Asn	Pro	Pro	Pro	Phe	Ala 240	Pro
Pro	Val	Met	Glu 245	Phe	Pro	Ala	Ala	His 250	Asp	Arg	Met	Val	Tyr 255	Leu	Gly
Leu	Ser	Asp 260	Tyr	Phe	Phe	Asn	Thr 265	Ala	Gly	Leu	Val	Tyr 270	Gln	Glu	Ala
Gly	Val 275	Leu	Lys	Met	Thr	Leu 280	Arg	Asp	Asp	Met	Ile 285	Pro	Lys	Glu	Ser
Lys 290	Phe	Arg	Leu	Thr	Thr 295	Lys	Phe	Phe	Gly	Thr 300	Phe	Leu	Pro	Glu	Val 305

Ala Lys Lys Phe Pro Asn Met Lys Ile Gln Ile His Val Ser Ala Ser
 310 315 320

Thr Pro Pro His Leu Ser Val Gln Pro Thr Gly Leu Thr Phe Tyr Pro
 325 330 335

Ala Val Asp Val Gln Ala Phe Ala Val Leu Pro Asn Ser Ser Leu Ala
 340 345 350

Ser Leu Phe Leu Ile Gly Met His Thr Thr Gly Ser Met Glu Val Ser
 355 360 365

Ala Glu Ser Asn Arg Leu Val Gly Glu Leu Lys Leu Asp Arg Leu Leu
 370 375 380 385

Leu Glu Leu Lys His Ser Asn Ile Gly Pro Phe Pro Val Glu Leu Leu
 390 395 400

Gln Asp Ile Met Asn Tyr Ile Val Pro Ile Leu Val Leu Pro Arg Val
 405 410 415

Asn Glu Lys Leu Gln Lys Gly Phe Pro Leu Pro Thr Pro Ala Arg Val
 420 425 430

Gln Leu Tyr Asn Val Val Leu Gln Pro His Gln Asn Phe Leu Leu Phe
 435 440 445

Gly Ala Asp Val Val Tyr Lys
 450 455

(2) INFORMATION FOR SEQ ID NO:207:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 4 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "core sequence LIQL"
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:207:

Leu Ile Gln Leu
 1

(2) INFORMATION FOR SEQ ID NO:208:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 4 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "core sequence IQLF"
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:208:

1

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 5 amino acids
 (B) TYPE: amino acid
 (D) TOPOLOGY: linear

(ix) FEATURE:

(A) NAME/KEY: misc feature

(D) OTHER INFORMATION: "core sequence WLIQL"

Trp Leu Ile Gln Leu

1

5

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 5 amino acids
 (B) TYPE: amino acid
 (D) TOPOLOGY: linear

(ix) FEATURE:

(A) NAME/KEY: misc feature

(D) OTHER INFORMATION: "core sequence LIQLF"

Leu Ile Gln Leu Phe

I

5

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 6 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ix) FEATURE:

(A) NAME/KEY: misc feature

(D) OTHER INFORMATION: "core sequence WLIQLF"

Tro Leu Ile Gln Leu Phe

1

5